

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Amendment of the Commission's Rules)	WT Docket No. 97-81
Regarding Multiple Address Systems)	

**REPLY COMMENTS OF THE
PERSONAL COMMUNICATIONS INDUSTRY ASSOCIATION**

The Personal Communications Industry Association ("PCIA")¹ hereby submits its comments in response to the Commission's *Further Notice of Proposed Rule Making and Order* in the above-captioned proceeding.² As the primary trade association representing the messaging industry, PCIA has a significant interest in this proceeding. Our messaging carriers, who serve over 95% of messaging customers throughout the country, require continued access to spectrum in the MAS bands in order to ensure that paging networks across the country continue to operate without interruption. PCIA's member carriers must also be allowed to use these channels as necessary to maintain and build out

¹ PCIA is the international trade association created to represent the interests of both the commercial and the private mobile radio service communications industries and the fixed broadband wireless industry. PCIA's Federation of Councils includes: the Paging and Messaging Alliance, the Broadband PCS Alliance, the Site Owners and Managers Association, the Private Systems Users Alliance, the Mobile Wireless Communications Alliance, and the Wireless Broadband Alliance. As the FCC-appointed frequency coordinator for the 450-512 MHz bands in the Business Radio Service, the 800 MHz and 900 MHz Business Pools, the 800 MHz General Category frequencies for Business Eligibles and conventional SMR systems, and the 929 MHz paging frequencies, PCIA represents and serves the interests of tens of thousands of FCC licensees.

² Amendment of the Commission's Rules Regarding Multiple Address Systems ("MAS"), WT Docket No. 97-81, *Further Notice of Proposed Rule Making and Order*, FCC 99-101, rel. July 1, 1999 (*Further Notice*).

their planned service areas under any new rules that are adopted to adhere to the legislative mandates set forth in the Balanced Budget Act of 1997.³

PCIA urges the Commission to retain the existing site-by-site licensing scheme for the MAS spectrum. The first-in-time, site-by-site licensing approach long used by industry and government has worked successfully to minimize the number of applications that are being processed on a mutually exclusive basis with other applications. The Commission should retain this approach in order to meet the Congressional mandate to avoid mutual exclusivity. Continued site-by-site licensing is also important because these bands are heavily encumbered and incumbent licensees have uniquely defined service areas. Conversely, licensing by geographic regions will *create* mutual exclusivity. Employing geographic area licensing would also be contrary to the public interest due to the unique service area needs of MAS licensees, and the inefficiencies of a geographic licensing scheme that creates small, unusable areas of spectrum in the highly encumbered MAS bands.

Alternatively, to the extent the FCC moves forward with any new licensing scheme, it must provide realistic interference protection for all MAS incumbent carriers consistent with existing FCC rules regarding interference protection. All existing uses should be grandfathered indefinitely and incumbent carriers should be allowed to expand operations, if their applications are not mutually exclusive. These actions would minimize service disruptions to incumbents and avoid the difficult task of forcing incumbents to relocate to other frequency bands.

³ Pub. L. No. 105-33, Title III, 111 Stat. 251 (1997) (“1997 Balanced Budget Act”).

I. BACKGROUND

Paging and narrowband PCS systems depend on networks of base stations linked by circuits that facilitate simulcast operation by which multiple stations can transmit the same message simultaneously over a specified geographic area. This use of simulcasting affords such systems widespread coverage and a high degree of building penetration.⁴ A CMRS paging provider in a single geographic area such as a metropolitan statistical area may, for example, use from ten to thirty transmitters on a single frequency in order to provide the required coverage and penetration.

Simulcast operation depends on highly precise adjustments of the phase relationship of the transmitters in order to minimize mutual interference among the co-channel base stations that make up the network. Linking these base stations requires circuits of high reliability and phase conformity. To achieve these goals, CMRS providers have long employed radio channels for what the industry terms “control links.” Radio circuits are of constant length and are under the direct control of the CMRS licensee. As such, control links that employ radio channels are generally superior to alternative wireline systems.⁵

⁴ Even when simulcasting is not employed, control links afford flexibility and reliability not otherwise available.

⁵ Wireline circuits are likely to be adjusted to accommodate the needs of the wireline network. This results in ongoing changes in the delay in a signal getting from the central paging terminal to the various base stations. As a result, wireline circuits are more likely to result in far less than optimum operation of simulcast systems as the area of mutual interference increases due to changes in the phase relationship of the signals brought about by changes in the paths used for routing the traffic from the paging terminal to the base stations.

As another alternative, several paging carriers have evolved their networks to utilize satellite control frequencies. While the use of these facilities is expanding, many medium-sized and small carriers continue to rely significantly on use the radio channel control links in the MAS bands because they are efficient and cost effective.

Responding to the paging industry's urgent need for additional control channels, in the early 1980's, the Commission made the multiple address system frequencies available for use by those licensees that offer paging and narrowband PCS. This 900 MHz spectrum provides much-needed capacity for paging and narrowband PCS in crowded markets where there is now a shortage of available spectrum in the 72-76 MHz bands, which were traditionally used for control links.

II. BEFORE DECIDING WHETHER TO AWARD SPECTRUM LICENSES THROUGH THE COMPETITIVE BIDDING PROCESS, THE COMMISSION MUST FIRST MAKE EVERY ATTEMPT POSSIBLE TO AVOID MUTUAL EXCLUSIVITY

In its *Further Notice*, the Commission seeks comment, *inter alia*, on the impact of the 1997 Balanced Budget Act on the Commission's proposals to allocate the 932/941 MHz and 928/959 MHz bands for subscriber-based services. While the 1997 Balanced Budget Act significantly revised the Commission's auction authority by eliminating the restriction that auctions be used only when the primary use of the spectrum involves the provision of subscriber-based services,⁶ Section 309(j) of the Communications Act of

⁶ The 1997 Balanced Budget Act requires the Commission to auction all categories of spectrum for which there are mutually exclusive applications, other than those expressly exempt by the legislation. Those licenses specifically exempted from the competitive bidding process include those issued by the Commission for public safety radio services, including private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-profit organizations, that: (a) are used to protect the safety of life, health, or property; and (b) are not made commercially available to the public." The legislative history that accompanied the legislation explains the exemption from competitive bidding as follows: [T]he exemption from competitive bidding authority for "public safety radio services" includes "private internal radio services" used by utilities, railroads, metropolitan transit systems, pipelines, private ambulances, and volunteer fire departments. Through private in nature, the services offered by these entities protect the safety of life, health, or property and are not made commercially available to the public. This service exemption also includes radio services used by not-for-profit organizations that offer emergency road services, such as the American Automobile Association (AAA). 143 Cong. Rec. H6173 (daily ed. July 29, 1997).

1934, as amended, has always required that the Commission make every possible effort to avoid instances of mutual exclusivity.⁷

Congress' direction to the Commission to avoid instances of mutual exclusivity has always been very clear. Section 309(j)(6)(E) of the Communications Act states that "nothing in... the use of competitive bidding, shall be construed to relieve the Commission of the obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and licensing proceedings."⁸ Not surprisingly, the legislative history accompanying the 1997 Balanced Budget Act further reinforced Congress' instruction.⁹ In addition, following enactment of the 1997 Balanced Budget Act, six Congressional leaders wrote Chairman Kennard to remind him of Congress' concern that "the Commission was ignoring its obligations under Section 309(j)(6)(E)" and that Congress "did not engage in an idle act" when it reaffirmed the Commission's responsibility to avoid mutual exclusivity in licensing.¹⁰

⁷ The Commission has determined that applications are "mutually exclusive" if the grant of one application would effectively preclude the grant of one or more other applications. *See Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, *Second Report and Order*, 9 FCC Rcd 2348, 2350 n.5 (1993) ("Competitive Bidding Second Report and Order").

⁸ 47 U.S.C. § 309(j)(6)(E).

⁹ 47 U.S.C. § 309(j)(6)(E). See also H.R. Conf. Rep. No. 105-217, 105th Cong., 1st Sess., at 572 (1997) ("Conference Report") ("[T]he conferees emphasize that, notwithstanding its expanded auction authority, the Commission must still ensure that its determinations regarding mutual exclusivity are consistent with the Commission's obligations under section 309(j)(6)(E). The conferees are particularly concerned that the Commission might interpret its expanded competitive authority in a manner that minimizes its obligations under section 309(j)(6)(E), thus overlooking engineering solutions, negotiations, or tools that avoid mutual exclusivity.")

¹⁰ Letter to Chairman William Kennard from Rep. John Dingell (D-MI), ranking minority member of the House Commerce Committee, Rep. Billy Tauzin (R-LA), Chairman of the Telecommunications Trade, and Consumer Protection Subcommittee of the House Commerce Committee, Senate Minority Leader Thomas Daschle (D-SD), and Senate Commerce, Science, and Transportation Committee members Sen. John Breaux (D-LA), Sen. Spencer Abraham (R-MI), and Sen. Slade Gorton (R-WA) (Dec. 22, 1998) at 2.

Given the aforementioned history, the Commission's primary focus in this proceeding should be on the use of a licensing scheme for these channels that is designed to minimize, if not eliminate, the instances of mutual exclusivity among qualified applicants for these channels. As required by Section 309(j)(6)(E), the Commission must first seek to avoid mutual exclusivity, then decide whether applications are auctionable if mutual exclusivity cannot be avoided, and then design an auction methodology that meets the public interest objectives.

III. BY RETAINING THE EXISTING FIRST-IN-TIME, SITE-BY-SITE LICENSING PROCEDURES FOR MAS FREQUENCIES, THE COMMISSION WILL MEET ITS STATUTORY MANDATE TO AVOID MUTUAL EXCLUSIVITY IN APPLICATION AND LICENSING PROCEEDINGS

PCIA, like many other commenters, strongly encourages the Commission to retain the existing site-by-site licensing scheme for the MAS spectrum.¹¹ The first-in-time, site-by-site licensing approach has worked well to minimize the number of applications that are being processed on a mutually exclusive basis with other applications. In addition, site-by-site licensing gives MAS licensees flexibility to create coverage areas that reflect their actual business needs.

In contrast, licensing by geographic regions would create instances of mutual exclusivity and is inappropriate due to the heavily encumbered nature of the 928/952 MHz and 928/959 MHz bands and the uniquely defined service areas of incumbent licensees. Contrary to Congress' explicit instructions, employing a system of geographic area licensing would automatically create mutual exclusivity in the encumbered 900 MHz

¹¹ See e.g., CellNet Data Systems, Inc. Comments at 8; Comsearch Comments at 2; Commonwealth Edison Comments at 9.

MAS bands. In addition, most of the urban and suburban areas are already saturated with incumbents. In fact, the few unserved areas that remain in congested areas, characterized by random sizes and shapes, likely cannot be developed by new operators without causing interference to operating incumbents. While the Commission would likely recover little revenue from an auction of spectrum in these particular bands, as shrewdly noted by CellNet, these unserved areas may be somewhat useful to incumbents or to new private licensees on a site-by-site basis.¹² Therefore, a geographic area licensing system should not be adopted as the primary basis for licensing the MAS spectrum.

IV. IF THE FCC PROCEEDS WITH ITS PROPOSALS, ALL EXISTING OPERATIONS SHOULD BE GRANDFATHERED INDEFINITELY CONSISTENT WITH THE COMMISSION'S EXISTING SEPARATION RULES

Should the Commission ultimately decide to auction any of the MAS frequencies or otherwise adopt a geographical licensing scheme, new licensees must be required to provide protection to all co-channel systems that are constructed and operating within their geographic service area. PCIA agrees with the majority of commenters that the Commission should not require incumbent licensees to downsize, reconfigure, or relocate their existing authorizations or operations.¹³ Grandfathering existing stations would minimize service disruptions to incumbents and avoid the difficult task of forcing incumbents to relocate to other frequency bands.

¹² CellNet Data Systems, Inc. Comments at 10.

¹³ See e.g., East Bay Municipal Utility District Comments at 14; United Telecom Council Comments at 11; American Petroleum Institute Comments at 17-18; Joint Supplemental Comments at 21 (Oct. 30, 1998).

The Commission should also allow incumbent licensees to continue to operate, or even expand, existing MAS facilities consistent with the existing 70-mile co-channel mileage separation standard of Section 22.625 of the Commission's Rules.¹⁴ Under the Commission's existing assignment policy for MAS facilities, a MAS master station is assumed to have a standard 25-mile radius service contour and is entitled to a 70-mile minimum distance separation between co-channel stations.¹⁵ Paging companies use MAS facilities to control paging base stations that are varying distances from its MAS master station.¹⁶ These distances range from less than one mile to 54 miles from the MAS master station. As such, although MAS facilities are assumed to have a 25-mile service contour, many paging licensees are authorized to use their MAS facilities to control base stations that are well beyond the assumed 25-mile service contour.¹⁷ At a minimum, the Commission must protect all existing MAS systems based upon the existing 70-mile minimum distance separation standard under Section 22.625 of the Commission's rules. Existing systems should further be permitted to modify their facilities within their existing separation contours.

Finally, like other commenters, PCIA urges the Commission to develop an interim policy that permits incumbent licensees to modify their MAS facilities during the

¹⁴ Section 22.625 of the Commission's Rules requires a minimum distance separation between co-channel fixed master station transmitters in the 928-960 MHz bands of 70 miles. *See* 47 C.F.R. § 22.625(a).

¹⁵ *See* Amendment of Sections 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies, 3 FCC Rcd 1564, 1569 (1998).

¹⁶ *Further Notice*, at ¶3.

¹⁷ This assumed service area is nowhere defined in the Commission's rules as limiting the placement of remote transmitters to be controlled by an MAS facility. Rather, the 25-mile service area is the area within which an acceptable grade of service may be obtained. *See Amendment of Sections 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the 900 MHz Multiple Address Frequencies*, PR Docket No. 87-5, 3 FCC Rcd 1564, 1569 (1988).

pendency of this proceeding.¹⁸ This request stems from the fact that incumbents are required to conduct business during the pendency of this proceeding and must be permitted, as necessary, and consistent with existing rules, to modify their MAS facilities. Any other result would cause undue harm to incumbents and is inconsistent with the public interest.

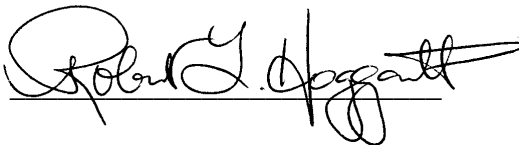
V. CONCLUSION

Control links are essential to most paging and narrowband PCS systems. Many of these critical links operate in the 900 MHz MAS spectrum. The Commission should follow Congress' explicit instructions in the 1997 Balanced Budget Act to avoid instances of mutual exclusivity in application and licensing proceedings and continue implementing a site-by-site licensing system for the MAS frequencies. However, should the Commission decide to issue licenses based upon a geographic licensing scheme, the FCC must accord existing messaging service providers the protection and flexibility needed to continue operating and expand in order to enhance the services they provide to the public.

¹⁸ See e.g., East Bay Municipal Utility District Comments at 14.

Respectfully submitted,

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